STENCIL/SCREEN PRINT APPARATUS

Dkt: 303.343US8

IN THE CLAIMS

Please amend the claims as follows.

- (Currently Amended) A semiconductor die stencil to assist in application of a printable 1. adhesive in a desired pattern onto a semiconductor die comprising:
- a sheet of semiconductor die stencil material to align above a die, the sheet having a top surface and a bottom surface to face the die, the sheet of material being impervious to a printable adhesive applied thereto;
- a plurality of apertures in the sheet of material defining a desired pattern for application of the printable adhesive; and
- a coating applied only to the bottom surface of the sheet to retard spreading of the printable adhesive onto the bottom surface of the sheet without obstruction of the flow of printable adhesive through the apertures onto the die.
- 2. (Original) The semiconductor die stencil of claim 1, wherein both the coating and the material have a surface tension, the surface tension of the coating being less than the surface tension of the material.
- 3. (Original) The semiconductor die stencil of claim 2, wherein the surface tension of the coating is at least an order of magnitude less than the surface tension of the material.
- 4. (Original) The semiconductor die stencil of claim 1, wherein the coating is a polymeric material.
- 5. (Withdrawn) A semiconductor die stencil to assist in application of a printable material onto a substrate comprising:
 - a sheet of material which is impervious to a printable material applied thereto;
 - a plurality of apertures in the sheet material defining a desired pattern; and
- a coating applied to at least one surface of the sheet to promote spreading of the printable material.

- 6. (Withdrawn) The semiconductor die stencil of claim 5, wherein both the coating and the sheet have a surface tension, the surface tension of the coating greater than the surface tension of the sheet.
- 7. (Withdrawn) The semiconductor die stencil of claim 5, wherein the coating is selected from the group consisting of tungsten, tungsten carbide, tungsten nitride, nickel, and nickel alloy.
- 8. (Previously Presented) A semiconductor die stencil to assist in application of a printable material in a desired pattern onto a semiconductor die comprising:
- a sheet of material to align above the die, the sheet having a top surface and a bottom surface to face the die, the sheet of material being impervious to a printable material applied thereto;
- a plurality of apertures in the sheet of material defining a desired pattern for application of the printable material; and
- a coating applied only to the bottom surface of the sheet to retard spreading of the printable material onto the bottom surface of the sheet without obstruction of the flow of printable material through the apertures onto the die.
- 9. (Original) The semiconductor die stencil of claim 8, wherein both the coating and the material have a surface tension, the surface tension of the coating being less than the surface tension of the material.
- 10. (Original) The semiconductor die stencil of claim 8, wherein the surface tension of the coating is at least an order of magnitude less than the surface tension of the material.
- 11. (Original) The semiconductor die stencil of claim 8, wherein the coating is a polymeric material.

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- 12. (Currently Amended, Withdrawn) A semiconductor die stencil:
 - a sheet of semiconductor die stencil material;
 - a plurality of apertures in the sheet material defining a desired pattern; and
- a coating applied to at least one surface of the sheet to promote spreading of a printable material through the apertures and onto a substrate.
- 13. (Withdrawn) The semiconductor die stencil of claim 12, wherein both the coating and the sheet have a surface tension, the surface tension of the coating greater than the surface tension of the sheet.
- 14. (Withdrawn) The semiconductor die stencil of claim 12, wherein the coating is selected from the group consisting of one or more of tungsten, tungsten carbide, tungsten nitride, nickel, and nickel alloy, in any combination.
- 15. (Withdrawn) The semiconductor die stencil of claim 12, wherein the printable material is selected from the group consisting of one or more of ink, polymer resins, diluted or soluble polymers, composite materials and solder paste, in any combination.
- 16. (Currently Amended, Withdrawn) A semiconductor die stencil:
 - a sheet of semiconductor die stencil material;
 - a plurality of apertures in the sheet material defining a desired pattern; and
- a coating applied to at least one surface of the sheet to promote spreading of a printable adhesive material through the apertures and onto a substrate.
- 17. (Withdrawn) The semiconductor die stencil of claim 16, wherein both the coating and the sheet have a surface tension, the surface tension of the coating greater than the surface tension of the sheet.

AMENDMENT AND RESPONSE UNDER 37 CFR § 1.116 – EXPEDITED PROCEDURE

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18. (Withdrawn) The semiconductor die stencil of claim 17, wherein the coating is selected from the group consisting of one or more of tungsten, tungsten carbide, tungsten nitride, nickel, and nickel alloy, in any combination.

19. (Withdrawn) The semiconductor die stencil of claim 16, wherein the printable adhesive is an adhesive polyimide.